

QUALITY ASSURANCE PROJECT PLAN
for
KODIAK ISLAND TRIBES
SUSTAINABLE FOODS CONSUMPTION ASSESSMENT

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THE VILLAGE COUNCILS OF SUN'AQ, OUZINKIE, PORT LIONS,
LARSEN BAY, AKHIOK AND OLD HARBOR

Submitted for consideration to:
U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

DATE: May 21, 2014

APPROVALS:

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Sun'aq Tribe of Kodiak

Date

M. Pamela Bumsted, Ph.D., Natural Resources Director

Date

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Date

Commented [BDM1]: Fix the spelling of Ginna's name and update her title as indicated.

Katherine Brown, Project Officer
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Date

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ACKNOWLEDGEMENTS

This Quality Assurance Project Plan (QAPP) is written and presented in order to satisfy federal EPA requirements.

The SUN'AQ TRIBE OF KODIAK developed this QAPP including the questionnaire from plans developed by the Seldovia Village Tribe, and also in part on the Columbia River Inter-Tribal Fish Commission, and the Squaxin Island and Tulalip Tribes' previous studies. We appreciate the above-mentioned tribal organizations for their work in adopted the appropriate language and format for assessment QAPPs and questionnaire forms to native tribes, which we used as templates. We also wish to thank the Village Council members and Tribal staff of Sun'aq, Ouzinkie, Port Lions, Larsen Bay, Akhiok and Old Harbor for their collaboration and efforts to make this project happen. We also wish to thank EPA for funding the project

DISTRIBUTION LIST

Official copies of this QAPP, accompanying documents, and any subsequent revisions will be provided to EPA and all those named on the approval page of this document. Addresses and other contact information for those named on the approval page of this document are as follows:

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Commented [BDM2]: Update Ginna's title as indicated.

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PROJECT BACKGROUND

For thousands of years, native tribes residing on the Kodiak Archipelago have shared and consumed traditional and customary foods originating from the Gulf of Alaska. However, concurrent with historical events and modern environmental pollution has been increasing evidence that human health within certain cultural populations (or subpopulations) may be at risk if traditional foods are consumed. Because traditional foods comprise 40% to 90% of rural-Alaskan diets, elevated levels of contaminants in these resources can be especially dangerous to Alaska natives (ATSDR 2009). Federal and/or state human-foods risk assessments that consider pollutants are typically based on national averages and habits, but application of such information is suspect when used to infer health risks at the local level (NEJAC 2002).

This project focuses on marine or freshwater-derived foods (but simply referred to as “seafood” here) harvested from the Gulf of Alaska, and consumed by Alaska Native populations at six different locations on Kodiak Island and Spruce Island. Activities proposed for this project will measure present-day food consumption habits and food quantities derived from finfish, shellfish, and marine mammal sources by people located in participating native villages. One major goal is to calculate accurate estimates of per capita seafood consumption at the tribal village scale.

Geographical Setting

This study will take place in a region about 275 air-miles south-southwest of Anchorage, Alaska, centered on Kodiak Island. With an area of about 3,600 square miles, Kodiak Island is the second largest in USA and its territories, and is surrounded by highly productive Gulf of Alaska waters. Some islands of the Kodiak Archipelago have been occupied continuously by humans for over 7,500 years (Crowell, 2001) and are the ancestral lands of the Sugpiaq (or today called Alutiiq) Alaska Natives. The original inhabitants of the archipelago relied heavily on maritime food resources. Today’s Sugpiaq descendants as well as non-tribal occupants of the archipelago still utilize seafood resources to a very high degree.

PRIMARY STUDY GOAL

This assessment attempts to determine a credible, commercial and non-commercially-obtained finfish, shellfish, and marine mammal consumption rates (expressed in grams/person/day) of representative subpopulations of Alutiiq Tribal members across Kodiak Archipelago, during the previous year. This assessment is not intended to document historical fish consumption rates. It is intended to accurately describe the current seafood consumption rates of native village members at various locations on Kodiak Island and Spruce Island, Alaska.

Study Questions

Due to unique geographic and cultural practices, residents of the Kodiak Archipelago who survive on customary subsistence food diets may differ from national seafood consumption averages, but we do not know how they differ. Are finfish, shellfish, and marine mammal consumption habits of tribal members in six villages located on Kodiak Island and Spruce Island significantly different from the reported national averages? For example, not all groups of people eat the same fish or parts of fish, nor do they each eat the same amount or same kind of meal (e.g., soups vs. fillets) with the same frequency. Because tribes are semi-isolated geographically, this study will attempt to look at the various seafoods consumed, by type (or species), by quantity consumed, and by age groups within

each tribe. Due to timing of fishing seasons and the fact many potential participants in this survey may be absent from their homes when interviews are conducted, the desired sampling sizes may be unachievable.

Commented [BDM3]: Include a brief discussion within this QAPP explaining how the project and resulting data/conclusions will be affected if the desired sample size is not attained.

Determine a credible, non-commercially plus commercially obtained fish and shellfish consumption rate (expressed in ounces & grams /day) by Kodiak Island Tribal members during all four seasons of the previous year. This assessment is not intended to assess historical fish consumption rates. It is intended to accurately describe the current observed consumption rate of Kodiak Island Tribal members.

OBJECTIVES

Collect data and information on overall consumption by Kodiak Island Tribal members of fish, shellfish and other subsistence foods obtained from harvests and grocery stores.

1. Identify the most frequented specific locations where fish, shellfish and marine mammals species (regularly consumed by tribal members) are harvested.
2. Create a questionnaire that will provide a credible description of the current consumption habits of subsistence foods (both whole and parts) of tribal members in regards to seasonality, special events/ceremonies, and during breast-feeding.
3. Estimate average daily consumption of fish by adults (18 years old and up).
4. Interview 'n' percent of the adult tribal members from each of five Kodiak Island villages and the Sun'aq population of the City of Kodiak.
5. Statistically identify the number of tribal members that consume fish and other subsistence food.

PROJECT PERSONNEL

The majority of project work will be conducted by the Sun'aq Tribal Special Projects Program Manager Kathy Drabek with assistance from staff of each participating village. Sun'aq Tribal Biologist Tom Lance will assist with technical writing, data analysis, mapping, and fieldwork as necessary. Sun'aq Natural Resources Director M. Pamela Bumsted will provide resources, oversight and supervision for the project and assessments to be conducted in each village.

Position Title: Traditional Foods Consumption Assessment Special Project Manager

Kathy Drabek, BARCH, LEED AP is the STK Project Manager for the Sustainable Foods Consumption Assessment. Her work involves overseeing and implementing STK's IGAP Special Fish Consumption Project. Kathy will be facilitating and supervising the majority of the work in this project in collaboration with tribal members from the villages of Sun'aq, Ouzinkie, Port Lions, Larsen Bay, Akhiok and Old Harbor.

Kathy is the primary contact for technical objectives, analytical procedures, QA requirements, problem resolution and general implementation of the QAPP. Key project members from each village (including hired interviewers) will be thoroughly instructed in the specific procedures,

methods, and quality assurance guidelines prior to tribal member interviews. They will be encouraged to complete research and training courses provided.

Commented [BDM4]: Recommend including a Training section that details exactly how interviewers will be trained, what they will be trained in (e.g., interview techniques, data entry, bias, etc.), and how training will be documented.

Position Title: Tribal Biologist

Thomas Lance, M.S. provides technical support and outreach for Sun'aq Tribe of Kodiak for a variety of natural resources concerns. Mr. Lance will assist this project with technical writing, analysis, mapping, and fieldwork as needed. He has broad academic and work backgrounds in resource assessment and management, both local and foreign. He is responsible for several grant-funded projects designed to enhance and protect important habitats within Kodiak's most-used salmon subsistence fishery watershed (e.g., Buskin River and Lake): Current projects managed include the "STK Salmon Habitat Expansion and Restoration Program" (USFWS, Tribal Wildlife Grant), and is the STK representative on an intra-governmental team to form a "Strategy Development for Establishment of a Voluntary Participation Water Temperature Monitoring Network in the Kodiak Archipelago, Alaska" (Western Alaska Landscape Conservation Cooperative - Grant). He will also manage/conduct a 5-year habitat assessment project starting in Spring 2014, investigating Buskin River estuary conditions, in response to the Kodiak Airport Expansion project (though FAA funding to Alaska DOT).

Position Title: Natural Resources Director

M. Pamela Bumsted, Ph.D. is the Natural Resources Director for Sun'aq Tribe of Kodiak. Her main work involves overseeing and implementing STK's IGAP programs and associated projects. Pam and her assistants will be supervising the work in this project in collaboration with the Natural Resources staff and Council members from the villages of Sun'aq, Old Harbor, Akhiok, Larsen Bay, Port Lions, Ouzinkie.

PROJECT ORGANIZATION AND STUDY DESIGN

Based in part on financial and logistical constraints, and presumed participant refusals (i.e., unreachable), a survey sample size of " n " + 20% participants will be calculated statistically for each tribe (based on a log-normal distribution, a typical convention for studies such as this). A statistical precision level of 20% (and equals standard deviation or " s " on log-scale = 1.2) was assumed. Other diet studies have had smaller standard deviation values, but due to constraints as mentioned above, this study uses a slightly broader confidence bounds.

$$\exp\left(1.96 \frac{s}{\sqrt{n}} \sqrt{1 - \frac{n}{N}}\right) = 1.2 \quad \text{then simplified} \quad \frac{1}{n} = \left(\frac{\ln s}{1.96 * s}\right)^2 + \frac{1}{N}$$

Figure 1. Formula for solving sample size necessary to meet statistical requirements based on log-normal population distribution (as in Toy et al, 1996). Expression on the right is further simplified.

Solving for required sample size n										PLUS 20%	
Village/Tribe Name	N	Village Size	s	\ln	1.2	$/$	(1.96×1.2)	$)^2 + 1/$		NON-Participation and Data Errors	
Akiohk	N = 71		$s = 1.2$	$(\ln$	1.2	$/$	(1.96×1.2)	$)^2 + 1/$	71	$n = 50.0$	60
Larsen Bay	N = 87		$s = 1.2$	$(\ln$	1.2	$/$	(1.96×1.2)	$)^2 + 1/$	87	$n = 58.0$	70
Old Harbor	N = 218		$s = 1.2$	$(\ln$	1.2	$/$	(1.96×1.2)	$)^2 + 1/$	218	$n = 95.0$	114
Ouzinkie	N = 161		$s = 1.2$	$(\ln$	1.2	$/$	(1.96×1.2)	$)^2 + 1/$	161	$n = 82.0$	98
Port Lions	N = 194		$s = 1.2$	$(\ln$	1.2	$/$	(1.96×1.2)	$)^2 + 1/$	194	$n = 90.0$	108
Sun'aq (Kodiak)	N = 599		$s = 1.2$	$(\ln$	1.2	$/$	(1.96×1.2)	$)^2 + 1/$	599	$n = 131.0$	157

Commented [BDM5]: Since age group differentiation is also a project study question, are there separate required sample sizes for each age group?

Commented [BDM6]: Add a title for this table and brief description of what this table is summarizing.

Tribal members will be selected for in-person interviews conducted by one or two interviewers hired locally from each participating village. Tribal members selected to do the interviews will be randomly chosen from tribal member registry lists provided by each tribe. Before any selection process takes place, tribal members under the age of 18 will be removed from the registry lists as well as known non-resident tribal members. "Resident" is defined as presently residing in one of the participating villages. Remaining names on the list will then each be assigned a number. Using a random integer generator, numbers will be generated and they will be contacted for an interview until the " n " + 20% of registered tribal members in that village are selected. Selected tribal members will be contacted 4 times before considering them to be "unreachable." In the event of interview refusals or not being able to successfully contact selected tribal members, other tribal members will be contacted in the order that their assigned numbers appear on the random number table until the quota of " n " + 20% of the village population interviews is achieved. Attempts will be made to contact selected tribal members who had no valid phone number by sending them a letter informing them of the assessment and asking them to contact tribal staff to arrange an appointment or by speaking to them in-person (if possible).

Interviewees will be shown food models approximating 3 and 5-ounce portions of fish. During the interview, if a tribal member answers “yes” to having youth 17 years or younger living in their household, they will be asked to provide additional dietary information for the youngest. Youth data will later be divided into 3 categories: youth seventeen to twelve; children group 1 eleven to six; and children group 2 five and under. Preferably, all interviews will be conducted at a central location within each village. However, interviews may be conducted at the homes of tribal members in the event they cannot physically travel to the location or are very uncomfortable conducting the interview at the central location.

METHOD OF INTERVIEWEE SELECTION

Participation in the study will be based on the following specific criteria:

- a) Adult has to be enrolled tribal member residing in the village or city;
- b) Adults have to be eighteen years or older.
- c) Adults responding for a child have to reside in the same household as the child.

PROJECT SCHEDULE

One to two interviewers will be locally hired in each of the participating villages (Sun’aq, Old Harbor, Akhiok, Larsen Bay, Port Lions and Ouzinkie) to carry out the bulk of the fieldwork of the project work. However, project facilitation, resources (forms, food models, digital recorders, etc.), training, and supervision will be the responsibility of STK Natural Resources staff. Tribal members will be contacted for interviews in May or June, 2014. Within each village, all interviews will preferably take place over a period of two days in June and July of 2014.

Out

QAPP Approval with EPA consultation	June 2014
Final Assessment forms approved	June 2014
Interviewers hired in each Village	June 2014
Training of interviewers	June -July 2014
Interviews conducted in Villages	July – August 2014
Data entered	September 2014
Reviewed and analyzed by STK staff	August – September 2014
Data analysis	July -August 2014
Final Report	December 31, 2014

ASSESSMENT TARGET POPULATION

The assessment includes five of the 10 Kodiak Island Tribes and Sun'aq tribal members from the City of Kodiak. These locations were chosen non-randomly for a geographic representation of the entire archipelago (north, south, east, west and Pacific Ocean and Shelikof Strait sides).

Using standard statistical comparisons, as in Toy et al., 1996, we will compare villages, look at different age groups and see if there are significant differences in fish consumption rates.

QUALITY CONTROL FOR INTERVIEWING

- Interviewers will read and follow *EPA's Guidance for conducting fish and wildlife consumption surveys*, http://water.epa.gov/scitech/swguidance/fishshellfish/techguidance/upload/1999_11_05_fish_fishquid.pdf.
- Drafts of the questionnaire form (see Appendix EE) and this QAPP will be approved by EPA, and revised accordingly, before being implemented in interviews.
- At least one pre-test interview will be given by interviewers.
- Before each interview begins, the interviewee will be read a confidentiality statement (see Appendix B).
- All interviewees will sign consent forms (see Appendix C) before interviews begin with the interviewee having the right to end the interview at any time.
- A Quality Assurance Monitor will be present during all interviews to observe and monitor. The Quality Assurance Monitor will be, either 1) STK's Foods Consumption Assessment Program Manager, 2) STK Natural Resource Director, or 3) a designated tribal staff member as agreed upon prior to interviews being conducted. At the end of each interview, if needed, a de-briefing session will be held between the Quality Assurance Monitor and the interviewer to review any improvements that could be made in interviewing technique.
- Each interview will be recorded provided the interviewee gives consent.
- Food models representing approximately 3-oz and 5-oz fish portions will be shown to interviewees when being asked questions about amounts of fish to increase accuracy (see Appendix GJ).
- Alaska Fish ID books will be made accessible and available to interviewees during interviews (see Appendix HJ).
- Number of completed interviews will be tracked by interviewers and STK staff.
- A checklist form will be followed by the interviewers during the interviews to facilitate consistency and dissemination of information to interviewee (see Appendix D).

Commented [BDM7]: If a tribal staff member is chosen, how will that person be trained (i.e., will that person receive specialized training?) or on what basis will that person be chosen to ensure that he/she will be able to meet all responsibilities required of a Quality Assurance Monitor.

Commented [BDM8]: How and where will the recorded interviews be stored?

QUALITY CONTROL FOR DATA ENTRY, MANAGEMENT, STORAGE, AND ANALYSIS

- Tribal members will be selected for interviews randomly.
- A contact activity log will be used when contacting Tribal members for interviews (see Appendix A).
- Interviewers will manually fill out the questionnaire forms during the interviews.
- At the end of each interview, a Quality Assurance Monitor will screen the completed questionnaire to insure accuracy, legibility, and completeness of the form. The Quality Assurance Monitor will initial and date the form to document acceptability.
- Raw data will be given to STK staff and directly entered into a Microsoft Excel Spreadsheet from pre-coded (i.e. numbered) questionnaires.
- Raw data will be entered into a Microsoft Excel Spreadsheet where mathematical calculations, if applicable, are performed by the spreadsheet using formulas.
- Personnel will review data entries to decrease transcription errors.
- If transcription errors are found, that data will be corrected and highlighted with a comment placed noting the date of change, the reason for changing it, and who changed it.
- Hard copies and/or originals of completed questionnaires, consent forms, check list forms, and contact activity log sheets will be filed in a designated “assessment” folder at STKs offices.
- Interviewers and Quality Assurance Monitors will receive procedural training and instruction to be eligible to collect data for this project.
- Interviewers and Quality Assurance Monitors will attend on- going training as time and resources allow, reviewing interviewing procedures, asking questions and fine-tuning skills.
- Data that do not meet **quality objectives** will not be used.
- Based upon 24-hour memory recall of dietary information provided by interviewee, if interviewer and Quality Assurance Monitor deem data to be unreliable, the data will not be used.
- Any statistical analyses performed on data will be verified for appropriateness and accuracy by an outside agency, such as personnel from Alaska Native Tribal Health Consortium (ANTHC).

Commented [BDM9]: These quality objectives need to be defined within this QAPP.

QUALITY CONTROL FOR CONFIDENTIALITY

- No personal information will be entered with data from completed questionnaires. Each completed questionnaire will be assigned a number and the number will be used to identify and reference data from specific interviews. These same questionnaire numbers will be used on checklist forms to reference specific interviews.
- Respondent code numbers will be used on contact activity log sheets instead of names to reference specific interviewees.
- No other individuals, other than the interviewee, the interviewer, and the Quality Assurance Monitor will be present in the room during an interview.
- At the beginning of each interview, the interviewer will read to the interviewee a confidentiality statement without any additions or deletions to the information.
- Assessment documents pertaining to the interviews will be kept in secured storage.
- No personal statements made by the interviewee during the interview, which could potentially identify the interviewee, will be shared.

FINAL REPORT

The results of this study shall be summarized in a final report. Ms. Drabek, with the assistance of Tom Lance, will prepare the report and be the major contact for technical and analytical information. The final report shall include a summary of assessment methods and a description of unusual occurrences. Confidentiality will be expressed and participants, EPA, and Village Council members will be given the results of the assessment upon completion of the final project. Personal data is considered confidential pursuant to the FOIA exemption for personal privacy. The information contained in this survey is personal to tribal members and therefore confidential and so considered confidential personal privacy information as defined in the Freedom of Information Act (FOIA) 40 CFR sec 2.200, and may also qualify as confidential business information pursuant to FOIA.

REFERENCES

- Columbia River Inter-Tribal Fish Commission. 1994. *A fish consumption survey of the Umatilla, Nez Perce, Yakama, and Warm Springs Tribes of the Columbia River Basin*. Portland (OR): Columbia River Inter-Tribal Fish Commission.
- Conover, W. J., *Practical Nonparametric Statistics*. 2nd ed., John Wiley & Sons, New York, 1980.
- Crowell, Aron. (2001). Looking Both Ways: Heritage & Identity of Alutiiq People. Fairbanks, University of Alaska Press.
- Department of Ecology State of Washington. September 2011. *Fish Consumption Rates Technical Support Document, A Review of Data and Information About Fish Consumption in Washington*. Publication no. 11-09-050, Version 1.0.
- Hodges, J. L., Jr., David Krech, Richard S. Crutchfield, *StatLab, An Empirical Introduction to Statistics*, McGraw-Hill Book Company, New York, 1975.
- Kissinger, Lon, Overview of Seafood Consumption Survey Methodologies. US Environmental Protection Agency [PDF]. Retrieved from <http://www.deq.state.or.us/wq/standards/docs/toxics/overviewstudies.pdf>. February, 2014.
- Merrill, Tracie and Michael Opheim, September, 2013. *Assessment of Cook Inlet Tribes Subsistence Consumption*.
- Moroney, M. J., *Facts from Figures*, Penquin Books, Baltimore, 1951.
- Pelto, Pertti J. & Gretel H. Pelto, *Anthropological Research, the structure of inquiry*. 2nd ed., Cambridge University Press, Cambridge, 1978.
- The Boise State University Public Policy Center. (2013). *Idaho Fish Consumption Rate Recommended Sample and Questions*.
- The Suquamish Tribe. (2000). *Fish Consumption Survey of the Suquamish Indian Tribe of the Port*.
- Toy, Kelly A., Nayak L. Polissar, Shiquan Liao, Gillian D. Mittelstaedt. (1996). *A Fish Consumption Survey of the Tullalip and Squaxin Island Tribes of the Puget Sound Region*.
- (USEPA) US Environmental Protection Agency. November 1998. *Guidance for Conducting Fish and Wildlife Consumption Surveys*. Retrieved from water.epa.gov/scitech/swguidance/fishshellfish/techguidance/upload/1999_11_05_fish_fishguid.pdf. January, 2014.
- Wampanoag Tribe of Gay Head (Aquinnah) *Fish and Shellfish Consumption Survey* (2002)

LIST OF APPENDICES

APPENDIX A-	Contact Activity Log
APPENDIX B-	Confidentiality Statement
APPENDIX C-	Consent Form
APPENDIX D-	Check List Form
APPENDIX E-	Recall List
APPENDIX F-	Draft Assessment Form
APPENDIX G-	Reference Maps
APPENDIX H-	Pictures of shellfish
APPENDIX I-	Pictures of food models
APPENDIX J-	Bibliographic list of fish id books that will be made available to Interviewees

Respondent Code #: _____

APPENDIX A
CONTACT ACTIVITY LOG

VILLAGE: _____

DATE CONTACTED TO ESTABLISH INTERVIEW:

Enter month/ day/year, and time of day. Allow up to four attempts to arrange an appointment. Enter Code NR for no response, LM for left message with someone who answered the phone or answering machine/voice message, C for completed call.

1) Date	2) Date	3) Date	4) Date
Time	Time	Time	Time
Code	Code	Code	Code

INTERVIEW APPOINTMENT DATE/TIME/LOCATION (Use 2 and 3 only if respondent asks to change original appointment. Circle either board room or fill in “other” for location).

1) MONTH/DAY/TIME (original) 2) MONTH/DAY/TIME (1st change)

LOCATION

LOCATION

3) MONTH/DAY/TIME (2nd

change) LOCATION

INTERVIEWER'S NAME

RESULT (*Circle One*)

- 1) Completed interview - Questionnaire Code # _____
- 2) Missed appointment – need to reschedule
- 3) Refused to participate:
Reason _____
- 4) Could not be contacted for interview
- 5) Interview not completed
Reason _____

Additional Comments

APPENDIX B

KODIAK ISLAND SUBSISTENCE CONSUMPTION ASSESSMENT – CONFIDENTIALITY STATEMENT

Interviewer: Please read as stated below without additions or deletions to the information provided to the respondent.

Hello, my name is _____ and I represent the _____
Tribe. We appreciate your willingness to participate in this survey.

The information given in response to this questionnaire will help the tribes of Sun'aq, Old Harbor, Akhiok, Larsen Bay, Port Lions and Ouzinkie understand actual rates of fish consumption, as well as that of other subsistence foods, by tribal members, what species are regularly eaten, how fish meals are prepared and cooked, and the locations of where fish are harvested from.

All of the personal identification information which you provide to us during the interview is confidential. The information you share with us will be given to Sun'aq Tribe of Kodiak's Natural Resources Department and will be entered into a database belonging to their department. Your responses to the questions will be combined with those of others so that your answers cannot be identified. No personal identifiers will be used. You will only be identified by a number system. Once the survey is complete, there will be a report completed summarizing the results. All participating members of the tribe will be sent a copy of this report.

The interview will take about a half-hour to an hour. It has 5 sections. To begin with, I'm going to ask you to sign a consent form and to provide some general background information. By signing the consent form, you will be granting your permission to conduct the interview, for the above mentioned tribes to use the information you have provided, and acknowledging being read this confidentiality statement. Additionally, on the consent form, you will be asked to check a box indicating whether you give or do not give permission for the interview to be recorded. We would like to tape-record the interview to insure accuracy and to help with verification of the data. At the beginning, I will also be documenting the time and date of the interview. In section 1 of the questionnaire form, I will be asking you to list everything you have eaten or drank in the past 24 hours as a memory-recall exercise. In section 2, I'll be asking you questions about what kinds of fish and shellfish you eat, how much you eat, and how that fish and shellfish is typically cooked or prepared. In section 3, if there is a child who is 17 years or younger living in your household, I will ask you to provide the same type of information as you gave in section 2 for the children in your household. Any information given about the children will also be confidential in the same ways as mentioned in the above paragraph. If applicable, I may ask you some additional questions regarding nursing. In the final section (section 4), I will ask you questions about where and how you obtain fish, shellfish and marine mammals. This may include asking you to mark on a map where you typically harvest particular subsistence foods.

At the end of this interview, upon request, you will be given the contact information of myself or of other tribal staff involved in this project in case you have any questions or concerns. At this time, do you have any questions for me?

APPENDIX C
KODIAK ISLAND SUBSISTENCE FOOD ASSESSMENT
CONSENT FORM

I understand that I am being asked to participate in an assessment/questionnaire activity, which will be conducted in-person, that will help the Tribes of Sun'aq, Old Harbor, Akhiok, Larsen Bay, Port Lions and Ouzinkie gather information about the actual rates of fish consumption by tribal members, what species are regularly eaten, how fish meals are prepared and cooked, and the locations of where fish are harvested from.

I have been read a confidentiality statement by the interviewer and have been given general information about the project and the types of questions I can expect to answer about myself and potentially a child (17 years old or younger) living in my household. I understand that any information I provide will be kept confidential, used only for the purposes of this study, and will not be used in any way that can identify me or the child. I understand that by checking one of the boxes below, I will be either giving or not giving consent for the interview to be recorded. All survey/questionnaire responses, notes, tapes, and records will be kept in a secured environment.

I understand that my participation in this project is completely voluntary and that I am free to decline to participate, without consequence, at any time prior to or at any point during the interview. Should I decline to participate, I understand that any information I have provided to the interviewer will be destroyed.

I understand that there are no risks involved in participating in this activity, beyond those risks experienced in everyday life.

I have read the information above. By signing below and returning this form, I am consenting to participate in this assessment/questionnaire project as designed by the Sun'aq Tribe of Kodiak and acknowledging that I have personally checked one of the boxes below.

Please check box

☐ I agree to have the interview tape-recorded

☐ I do not agree to have the interview tape-recorded

Participant's Name _____ Date _____

Signature _____ Date _____

Interview/Questionnaire Code #_____

APPENDIX D

CHECK LIST FOR SUBSISTENCE CONSUMPTION INTERVIEWS

To be checked off by Interviewer

- ☐ Confidentiality statement disclosed to interviewee
- ☐ Signed consent form by interviewee
- ☐ Audio recorder turned on *(if applicable)*
- ☐ Commonly Consumed Items List
- ☐ Start time of interview recorded
- ☐ Name and phone number recorded for interviewee
- ☐ End time of interview recorded
- ☐ Audio recorder turned off *(if applicable)*
- ☐ Number assigned to completed questionnaire
- ☐ Initials of Quality Assurance Monitor on completed questionnaire
- ☐ Contact information given to interviewee *(if applicable)*

Interviewer_____ Date_____

APPENDIX E

MEMORY RECALL – COMMONLY CONSUMMED ITEMS:

To be used with Section 1, Memory Recall as an aid, by Interviewer

Consider:

Breakfast

Lunch

Dinner

& Snacks

Beverages 1. Milk 2. Juice 3. Coffee 4. Tea 5. Blended drinks 6. Water 7. Soda	Vegetables 1. Fresh 2. Canned 3. Frozen 4. Dried
Cereals 1. Dry 2. Hot	Breads, pancakes or pastries (including cake and pie)
Eggs & Cheese	Meat & Seafood
Fruits 1. Fresh 2. Canned 3. Frozen 4. Dried	Snacks

Questionnaire Number _____

APPENDIX F

QUESTIONNAIRE FORM



FY2014 Subsistence Food Dietary Assessment of Sun'aq, Old Harbor, Akhiok, Larsen Bay and Ouzinkie Tribes of Kodiak Island, AK

IMPORTANT: READ CONFIDENTIALITY STATEMENT TO RESPONDENT BEFORE BEGINNING INTERVIEW AND HAVE RESPONDENT SIGN CONSENT FORM

BACKGROUND INFORMATION TO ASK PERSON BEING INTERVIEWED:

Date	
Time Interview begins	
Time Interview ends	

Name	
Gender	
Phone	
Birth date/Location	
Residence	

Months of the year at _____ village residence

January	February	March	April	May	June

July	August	September	October	November	December

Questionnaire Number _____

SECTION 1 - MEMORY RECALL

I am now going to ask you to remember all of the food and drinks that you ate yesterday, from the time you woke up in the morning until the time you went to sleep for the night. In addition to asking you about the type of food, I will show you some examples of serving sizes in order to determine the amount you actually ate.

DIETARY INTAKE - 24 HOUR RECALL

<u>Intake Day</u>	<u>Interviewers Opinion of Information</u>	<u>Intake Was</u>
Sunday 1	Reliable.....1	Typical.....1
Monday.....2	Unable to recall one or more meals.....2	Considerably less than typical.....2
Tuesday.....3	Unreliable for other reasons.....3	Considerably more than typical..3
Wednesday 4		
Thursday..... 5		
Friday.....6		
Saturday 7		

Line No.	Time Eaten A=AM P=PM	Foods and Beverages	Amount (oz. / grams)	Complete Description
	Hr. Min			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Comments (Give line no. when appropriate):

Interviewer fills out this section:

Intake day _____(1-7)

Opinion of Information _____(1-3)

Intake was _____(1-3)

Questionnaire Number _____

DIETARY INTAKE CONTINUATION PAGE

<u>Intake Day</u>	<u>Interviewers Opinion of Information</u>	<u>Intake Was</u>
Sunday 1	Reliable.....1	Typical.....1
Monday..... 2	Unable to recall one or more meals.....2	Considerably less than typical.....2
Tuesday..... 3	Unreliable for other reasons..... 3	Considerably more than typical..3
Wednesday 4		
Thursday..... 5		
Friday..... 6		
Saturday..... 7		

Line No.	TimeEaten A=AM P=PM	Foods and Beverages	Amount (ounces/grams)	Complete Description
	Hr. Min			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

Comments (Give line no. when appropriate):

Interviewer fills out this section:

Intake day____(1-7)

Opinion of Information____(1-3)

Intake was____(1-3)

Questionnaire Number _____

SECTION 2 - ADULT CONSUMPTION OF FISH, SHELLFISH & MARINE MAMMALS

- 1) During which two months of the year would you say you eat the most finfish, shellfish and marine mammals? [Circle response(s)]

Month	Finfish	Shellfish	Marine Mammals
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			
All months the same			
Never/rarely			
Unknown			

- 2) During the months you indicated you eat the most finfish, shellfish or marine mammals, about how many meals of them do you eat on a weekly basis? (Remember to include finfish/shellfish/marine mammals consumed for breakfast, lunch, dinner and snacks).

Average # of finfish meals weekly: _____ (two highest months)
Average # of shellfish meals weekly: _____ (two highest months)
Average # of marine mammal meals weekly: _____ (two highest months)

- 3) During which two months would you say you usually eat the least finfish, shellfish or marine mammals, ?

Month	Finfish	Shellfish	Marine Mammals
January			
February			
March			
April			
May			
June			

Questionnaire Number _____

July			
August			
September			
October			
November			
December			
All months the same			
Never/rarely			
Unknown			
All months except 2 marked in question 1 are equally low			

- 4) During the months you indicated you eat the least fish, about how many meals of them do you eat on a weekly basis?

Average # of finfish meals weekly: _____ (two lowest months)
 Average # of shellfish meals weekly: _____ (two lowest months)
 Average # of marine mammal meals weekly: _____ (two lowest months)

- 5) On average throughout the year, about how many finfish, shellfish or marine mammals meals weekly do you eat?

Average # of finfish meals weekly: _____ (two lowest months)
 Average # of shellfish meals weekly: _____ (two lowest months)
 Average # of marine mammal meals weekly: _____ (two lowest months)

- 6) What is the estimated portion size of fish you eat in those meals that includes fish?

[SHOW THE RESPONDENT FOOD MODELS AND ENTER THE AVERAGE SERVING SIZE IN OUNCES/GRAMS]

Average serving size (ounces/grams):

Questionnaire Number _____

Table 1

I am now going to ask you some questions on specific types of seafood that you eat. For each type mentioned, I am going to ask you several questions concerning how often you eat it and which parts of the fish are usually eaten (see Table 1). See note at end of table for Type Codes (*A, P, B, S, O*).

Finfish, Shellfish, or Other Type	Eaten ? Yes or No	How frequently do you eat Fish Type	Average number of meals per month	Parts usually consumed for each species (<i>circle answers</i>) Yes or No							
		N = Never R = Rarely (once a week) S = Sometimes (2- 5 times per week) F = Frequently (almost every day)		Fillet	Skin	Head	Eggs	Bones	Belly fat or flaps or meat	Other Organs	Stews or Chowder or Hash
<i>A</i> Pink (Humpy) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Chum (Dog) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Coho (Silver) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Sockeye (Red) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Chinook (King) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Steelhead	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Dolly Varden Trout	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Rainbow Trout	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Halibut	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Black Cod (Sablefish)	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Lingcod	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Grey Cod	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Black Rockfish	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Red Rockfish	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N

Questionnaire Number _____

Finfish, Shellfish, or Other Type	Eaten ? Yes or No	How frequently do you eat <u>Fish Type</u>	Average number of meals per month	Parts usually consumed for each species (<i>circle answers</i>) Yes or No							
		N = Never R = Rarely (once a week) S = Sometimes (2-5 times per week) F = Frequently (almost every day)		Fillet or meat of octopus shellfish etc.	Skin	Head	Eggs	Bones	Belly fat or flaps or meat	Other Organ	Stews or Chowder or Hash
P Pollock	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Greenling	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Herring	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Eulachon (hooligan, candlefish)	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Sandlance or Needlefish	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Dogfish Shark	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Salmon Shark	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
B Sculpin	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
S Clams (butter, littleneck, razor, surf, horse, geoduck)	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Barnacles	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Cockles	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Mussels	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Scallops	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Chiton or Limpet	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Dungeness crab	Y N	R S F N		Y N	na	na	na	na	na	na	Y N

Questionnaire Number _____

Finfish, Shellfish, or Other Type	Eaten ? Yes or No	How frequently do you eat Fish Type	Average number of meals per month	Parts usually consumed for each species (circle answers) Yes or No								
		Fillet or meat of octopus shellfish etc		Skin	Head	Eggs	Bones	Belly fat or flaps or meat	Other Organ	Stews or Chowder or Hash		
S Crab (including Tanner, Red, Blue, or Golden)	Y N	R S F N		Y N	na	na	na	na	na	na	na	Y N
S King Crab (Red, Golden, Blue)	Y N	R S F N		Y N	na	na	na	na	na	na	na	Y N
O Octopus or Squid	Y N	R S F N		Y N	na	na	na	na	na	na	na	Y N
O Sea Urchin or Sea Cucumber	Y N	R S F N		Y N	na	na	Y N	na	na	na	na	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N

** Fish Type Code: A = anadromous, P = pelagic, B = bottom, S = shellfish, O = Other

Please tell me about how fish is usually (throughout the year) prepared or cooked in your home (more than selection from the following may be given). Please also indicate how often fish is prepared/cooked in that particular manner. (See Table 2)

Table 2

Is the fish ever... (Circle Yes if cooked that way)	HOW OFTEN? (CIRCLE 1,2, OR 3)		
	Once a week	Less than once a week, but more than or equal to once a month	Less than once a month
a. pan-fried? Yes...1 No ...2 go to b	1	2	3

Questionnaire Number _____

b. deep-fried? Yes...1 No ...2 go to c	1	2	3
c. poached in water? Yes...1 No ...2 go to d	1	2	3
d. boiled as soup, chowder or stew? Yes...1 No ...2 go to e	1	2	3
e. baked? Yes...1 (Includes fish pie No ...2 go to f or Perok)	1	2	3
f. broiled? Yes...1 No ...2 go to g	1	2	3
g. smoked? Yes...1 No ...2 go to h	1	2	3
h. dried or Yes...1 dried into a powder? No...2 go to I	1	2	3
i. eaten raw? Yes...1 (includes pickled) No2 go to j	1	2	3
j. roasted over an open Yes...1 fire or barbecued? No ...2 go to k	1	2	3
k. canned? Yes...1 (Includes jarred and kippered)	1	2	3
l. salted? Yes...1 No...2	1	2	3

Questionnaire Number _____

SECTION 3 – CHILD CONSUMPTION OF FISH

7) Do you regularly prepare the meals in your household? (Circle Yes or No)
Yes No

8) Are there any children 5 years or younger living in your household? (Circle Yes or No)
Yes No

IF NO, GO TO QUESTION 9,

IF YES, CONTINUE WITH REST OF QUESTION 8

8A. Please provide the following information for the youngest person in your household who is 17 years of age or less:

First Name _____

Male or Female (Circle Male or Female)

In what month and year was this child born:

____/____

Your relationship to child (Enter mother, father, aunt, uncle, etc.)

8B. Throughout the year, what is the average portion size of fish this child eats in a meal that includes fish?

[SHOW THE RESPONDENT FOOD MODELS AND ENTER THE AVERAGE SERVING SIZE IN OUNCES OR CIRCLE “EATS NO FISH”]

Average # serving size (ounces): _____ ounces

Eats no fish

IF THEY ANSWERED “EATS NO FISH”, SKIP TO QUESTION 9

8C. A few minutes ago you described which types of fish you eat and which parts are normally consumed. This information was put into Table 1 (SHOW TABLE). For the child listed, please provide the same information on a separate table (Table 3).

Questionnaire Number _____

Table 3

I am now going to ask you some questions on specific types of seafood that you eat. For each type mentioned, I am going to ask you several questions concerning how often you eat it and which parts of the fish are usually eaten (see Table 1). See note at end of table for Type Codes (*A, P, B, S, O*).

Finfish, Shellfish, or Other Type	Eaten? Yes or No	How frequently do you eat Fish Type N = Never R = Rarely (once a week) S = Sometimes (2-5 times per week) F = Frequently (almost every day)	Average number of meals per month	Parts usually consumed for each species (<i>circle answers</i>) Yes or No							
				Fillet	Skin	Head	Egg s	Bones	Belly fat or flaps or meat	Other Organs	Stews or Chowder or Hash
<i>A</i> Pink (Humpy) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Chum (Dog) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Coho (Silver) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Sockeye (Red) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Chinook (King) Salmon	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Steelhead	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>A</i> Dolly Varden Trout	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Rainbow Trout	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Halibut	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Black Cod (Sablefish)	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Lingcod	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Grey Cod	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Black Rockfish	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
<i>P</i> Red Rockfish	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N

Questionnaire Number _____

Finfish, Shellfish, or Other Type	Eaten? Yes or No	How frequently do you eat	Average number of meals per month	Parts usually consumed for each species (<i>circle answers</i>) Yes or No							
		<u>Fish Type</u> N = Never R = Rarely (once a week) S = Sometimes (2-5 times per week) F = Frequently (almost every day)		Fillet or meat of octopus shellfish tc.	Skin	Head	Egg s	Bones	Belly fat or flaps or meat	Other Organ	Stews or Chowder or Hash
P Pollock	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Greenling	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Herring	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Eulachon (hooligan, candlefish)	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Sandlance or Needlefish	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Dogfish Shark	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
P Salmon Shark	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
B Sculpin	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
S Clams (butter, littleneck, razor, surf, horse, geoduck)	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Barnacles	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Cockles	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Mussels	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Scallops	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
S Chiton or Limpet	Y N	R S F N		Y N	na	na	na	na	na	na	Y N

Questionnaire Number _____

<i>S</i> Dungeness crab	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
Finfish, Shellfish, or Other Type	Eaten? Yes or No	How frequently do you eat Fish Type N = Never R = Rarely (once a week) S = Sometimes (2-5 times per week) F = Frequently (almost every day)	Average number of meals per month	Parts usually consumed for each species (circle answers) Yes or No							
				Fillet or meat of octopus shellfish etc.	Skin	Head	Eggs	Bones	Belly fat or flaps or meat	Other Organ	Stews or Chowder or Hash
<i>S</i> Crab (including Tanner, Red, Blue, or Golden)	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
<i>S</i> King Crab (Red, Golden, Blue)	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
<i>O</i> Octopus or Squid	Y N	R S F N		Y N	na	na	na	na	na	na	Y N
<i>O</i> Sea Urchin or Sea Cucumber	Y N	R S F N		Y N	na	na	Y N	na	na	na	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
_____	Y N	R S F N		Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N

** Fish Type Code: *A* = anadromous, *P* = pelagic, *B* = bottom, *S* = shellfish, *O* = Other

Questionnaire Number _____

8D. On average, throughout the entire year, about how many fish meals weekly doe the child eat?

Average # of fish meals weekly: _____
Average # of shellfish meals weekly: _____

8E. At what age (in months) did the child begin eating meals that include fish? [ENTER NUMBER OF MONTHS OR CIRCLE EITHER "NOT YET" OR "UNKNOWN"]

_____ Months [ONLY FILL IN MONTHS OR YEARS, NOT BOTH]
_____ Years [ONLY FILL IN MONTHS OR YEARS, NOT BOTH]

Not Yet

Unknown

9) IF RESPONDENT IS MALE, SKIP TO QUESTION #10

The next few questions are being asked to get better information on the diet of very young children in relation to nursing.

SKIP TO QUESTION 9C, IF THEY ANSWERED "MOTHER" IN QUESTION 8A
SKIP TO QUESTION 9B, IF THEY ANSWERED "GRANDMOTHER OR GREAT
GRANDMOTHER" IN QUESTION 8A

9A. Have you ever given birth? (Circle Yes or No)

Yes No

IF NO, SKIP TO QUESTION #10

9B. In what month and year was your last child born:

____/____

9C. Was the baby breast fed? (Circle Yes, No, Unknown)

Yes No Unknown

IF NO, SKIP TO QUESTION #10

9D. At what age (in months) did the child stop breast feeding? (ENTER NUMBERS IN MONTHS OR CIRCLE "STILL BREAST FEEDING")

_____months SKIP TO QUESTION #10

Still breast feeding

9E. At what age (in months do you plan to stop breast feeding your child?

_____months

Questionnaire Number _____

SECTION 4 – OTHER SUBSISTENCE FOODS

10) I am now going to ask you some questions about your consumption of marine mammals and other non-fish subsistence foods.

Table 4

		Parts usually consumed for each species (Circle answer)						
Type of marine mammal (Circle yes if commonly eaten)	Average number of meals in a year	Meat	Ribs	Intestines	Liver	Blubber/Fat	Flippers	Other organs /Parts (example: oil)
Harbor Seal		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes No (if Yes, go to next columns)		No	No	No	No	No	No	No
Sea Lion		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes No		No	No	No	No	No	No	No

Answer Questions 11 through 14 only if respondent answers “yes” in Table 4 for consuming marine mammals – if not, skip to question #15.

11.) How do you typically prepare harbor seal? If part is typically prepared this way, please put “X” under the cooking/preparation method

Part	Boiled	Fried	Other cooking method
Meat			
Ribs			
Intestines			
Liver			
Skin/Blubber or Fat			
Flippers			
Other (please specify)			

Please explain if "other" is filled in for sea lion (or parts) or for cooking method:

Questionnaire Number _____

12) How much harbor seal meat (or parts) do you typically eat in a meal?

- Less than half a plate (regular dinner size plate)
- Half a plate (regular dinner size plate)
- A full plate (regular dinner size plate)
- More than one full plate (regular dinner size plate)

13) How do you typically prepare Sea Lion? If part is typically prepared this way please put an "X" under the cooking/preparation method

Part	Boiled	Fried	Other cooking method
Meat			
Ribs			
Intestines			
Liver			
Skin/Blubber or Fat			
Flippers			
Other (please specify)			

Please explain if "other" is filled in for Sea Lion part or for cooking method:

14) How much Sea Lion meat (or parts) do you typically eat in a meal?

- Less than half a plate (regular dinner size plate)
- Half a plate (regular dinner size plate)
- A full plate (regular dinner size plate)
- More than one full plate (regular dinner size plate)

15) How often do you eat bidarkis (Black leather chitons) in a year?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never – SKIP TO 17

Questionnaire Number _____

16) How many bidarkis do you generally eat in a meal?

17) How often do you eat limpets (china caps) in a year?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 19

18) How many limpets (china caps) do you generally eat in a meal?

19) How often do you eat mussels harvested from local beaches?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 21

20) How many mussels do you generally eat in a meal?

21) How often do you eat butter clams harvested from local beaches?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 23

If respondent eats butter clams but gets them from other sources (like grocery stores):

Source(s) (please list)	# of clams (in a year) from source
----------------------------	---------------------------------------

_____	_____
_____	_____
_____	_____

22) How many butter clams do you generally eat in a meal?

23) How often do you eat steamers (or little neck) clams from local beaches?

[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 25

If respondent eats steamers but gets them from other sources (like grocery stores):

Source(s) (please list)	# of clams (in a year) from source
----------------------------	---------------------------------------

_____	_____
_____	_____
_____	_____

24) How many little neck clams do you generally eat in a meal?

25) How often do you eat snails in a year?

[FOR EACH SNAIL SPECIES, ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

Hairy tritons (large snails) Periwinkles (very small snails)

_____ times a year _____ times a year

Never - SKIP TO 27 Never - SKIP TO 27

26) How many snails do you generally eat in a meal? (Enter number for each snail species)

Questionnaire Number _____

_____ **Hairy tritons** _____ **Periwinkles**

27) How often do you eat octopus harvested from local beaches?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 29

28) How many octopus do you generally eat in a year?

29) How often do you eat sea birds (including ducks)?
[ENTER NUMBER OF TIMES A YEAR OR CIRCLE NEVER]

_____ times a year

Never - SKIP TO 31

30) How many sea birds (including ducks) do you generally eat in a year?

Questionnaire Number _____

SECTION 5 - OBTAINING FISH

31) These next questions deal with where and how you obtain fish and other species.

31A. Do you catch fish for either personal consumption or for use by your tribe in some way?

Yes

No

IF NO, SKIP TO QUESTION #33

31B Please indicate on the map(s) (show map(s)) where you usually catch the following species:

REFER TO MAPS - please write in locations as well next to species

Fish

Pink Salmon	_____
Chum Salmon	_____
Coho Salmon	_____
Pink Salmon	_____
Sockeye Salmon	_____
Chinook Salmon	_____
Steelhead	_____
Rainbow Trout	_____
Dolly Varden Trout	_____
Halibut	_____
Black Cod	_____
Lingcod	_____
Grey Cod	_____
Black Rockfish	_____
Red Rockfish	_____
Pollock	_____
Flounder/Sole	_____
Herring	_____
Sculpin	_____
Dogfish Shark	_____
Salmon Shark	_____
Eulachon	_____
Needlefish	_____

Shellfish

Butter clam	_____
Pacific littleneck	_____
Razor clam	_____
Surf clam	_____
Cockles	_____

Questionnaire Number _____

Mussels	_____
Geoduck	_____
Scallops	_____
Chiton	_____
Limpet	_____
Dungeness crab	_____
Tanner, bairdi, opilio	_____
Red King crab	_____
Octopus	_____
Squid	_____
Sea Urchin	_____
Sea cucumber	_____
Other	_____
Other	_____
Other	_____

Marine Mammals

Harbor Seal	_____
Sea Lion	_____

32) About how far from home do you usually travel to fish? (Circle response)

0-5 miles	21-25 miles
6-10 miles	26-50 miles
11-15 miles	51-75 miles
16-20 miles	76-100 miles
more than 100 miles	

33) Of all the fish you eat in a year, approximately how many do you get from?

	Total	Percent
Fish caught by yourself or family members	_____	_____
Grocery Stores	_____	_____
Other Sources:		
Friends who fish	_____	_____
Ceremonies (example: potlucks)	_____	_____
Distribution by the tribe	_____	_____
Other (list) (example: restaurants)	_____	_____
_____	_____	_____
_____	_____	_____

This column
filled in by
STK staff

Questionnaire Number _____

34) On average, throughout the year, how often do you attend ceremonies or other community events (examples: potlucks, weddings, etc.)? (Circle response)

never - END OF INTERVIEW

less than 1 time per month

1-3 times per month

4-6 times per month

more than 6 times per month

35) How often do you eat fish at these ceremonies? (Circle response)

rarely/never - END OF INTERVIEW

less than 1/2 of the ceremonies or events

at about 1/2 of the ceremonies or events

at nearly all ceremonies or events

36) How much fish do you usually consume at each of these events?

none

1-2 6oz/grams servings

3-4 6oz/grams servings

5-6 6oz/grams servings

more than 6 6-oz/grams servings

Questionnaire Number _____

Conclusion:

Thank you for your cooperation in participating in this assessment. Your participation will significantly contribute to information needed to help protect your natural resources and provide guidance for public health programs for your tribe.

Time Interview Ends: __ / __

Section filled out by interviewer

Number assigned to adult interviewed:

Number assigned to child in household:

Assessment received on __/__/__

**Section filled out by Quality Assurance
Monitor**

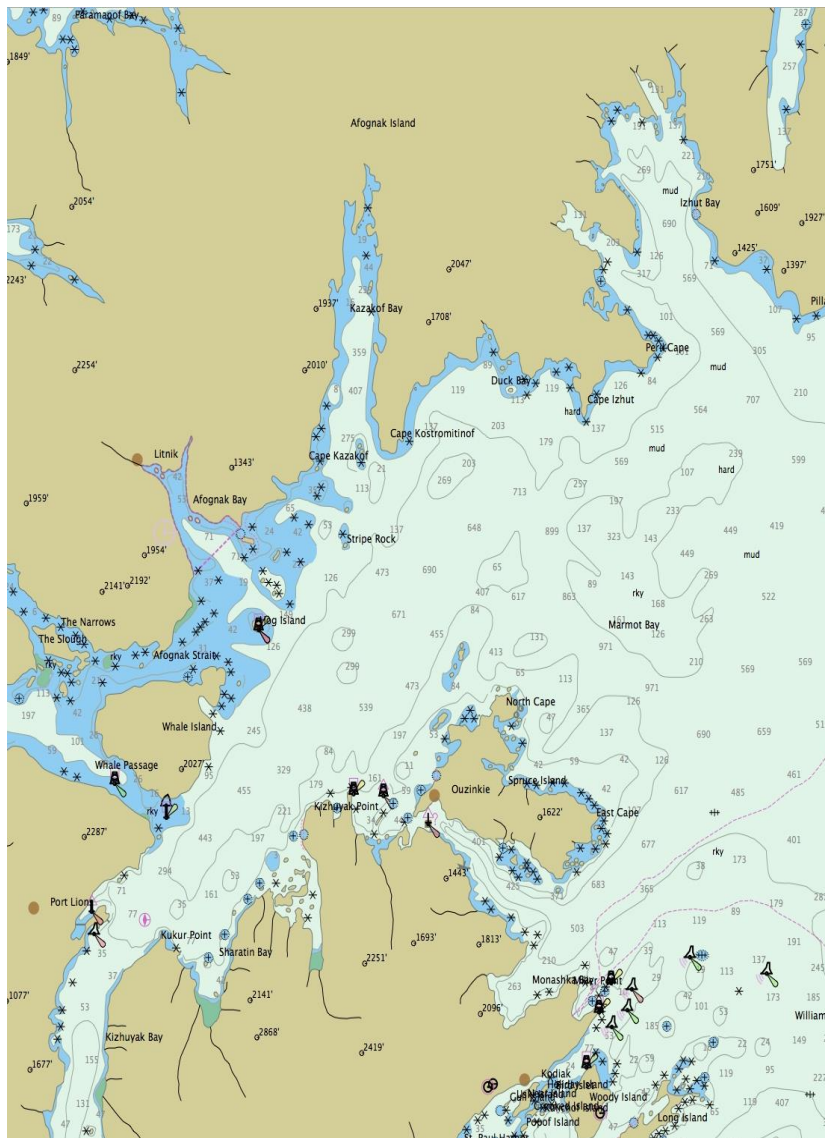
I have examined this questionnaire form and to my knowledge the data has been recorded accurately and there is no missing data or incompleteness.

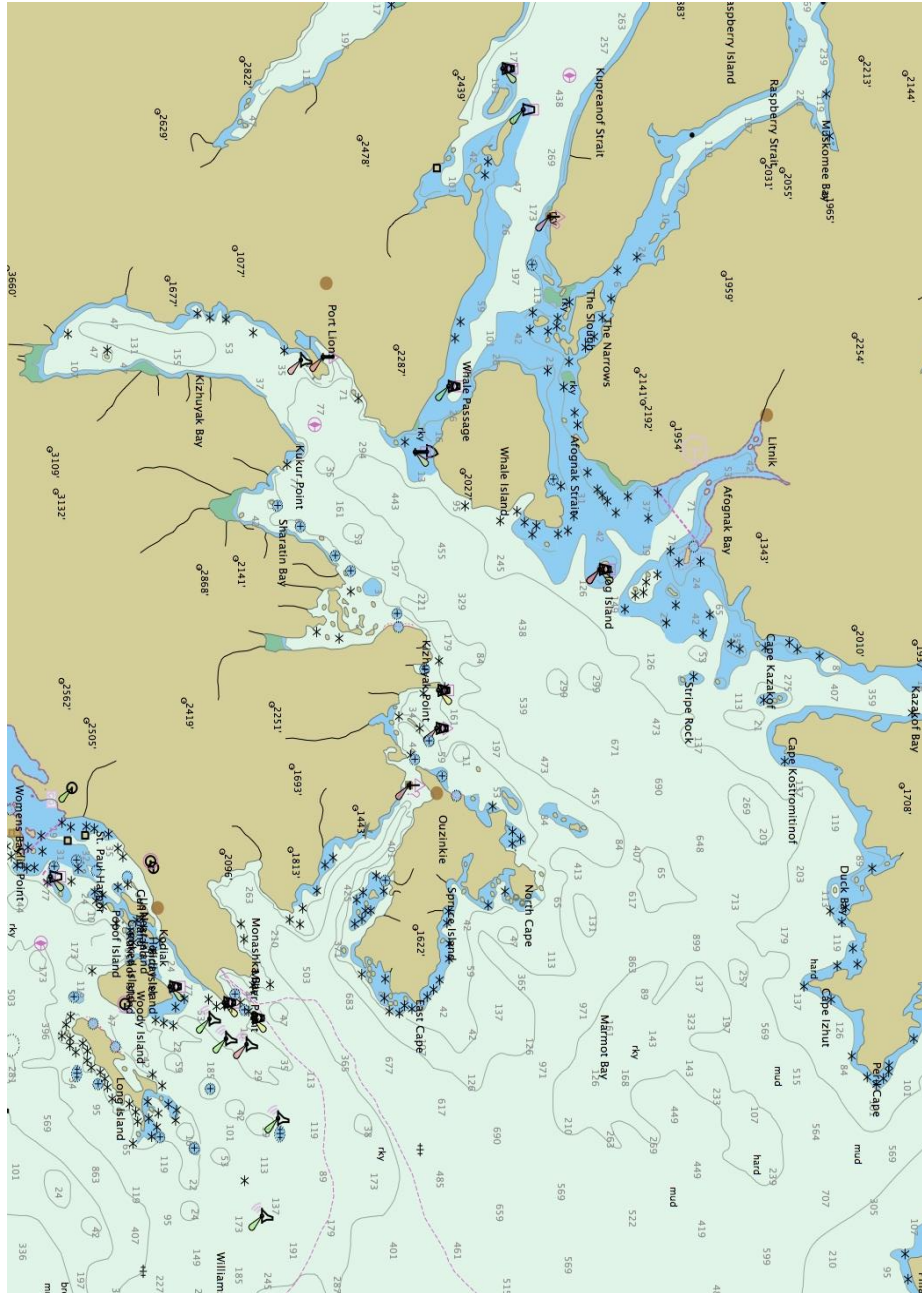
Print
name _____

Initials _____ Date _____

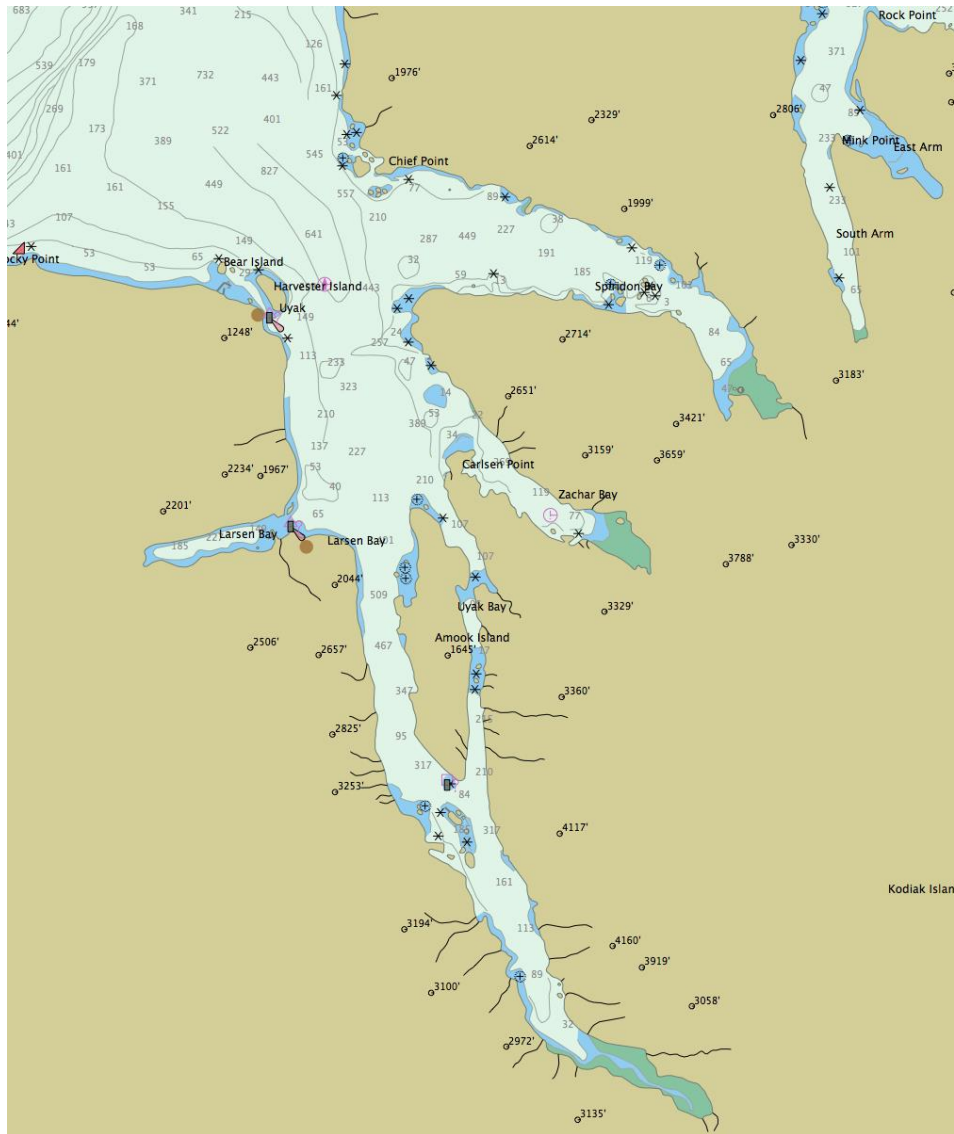
REFERENCE MAPS FOR IDENTIFYING FISHING LOCATIONS

Ouzinkie Subsistence Area Map

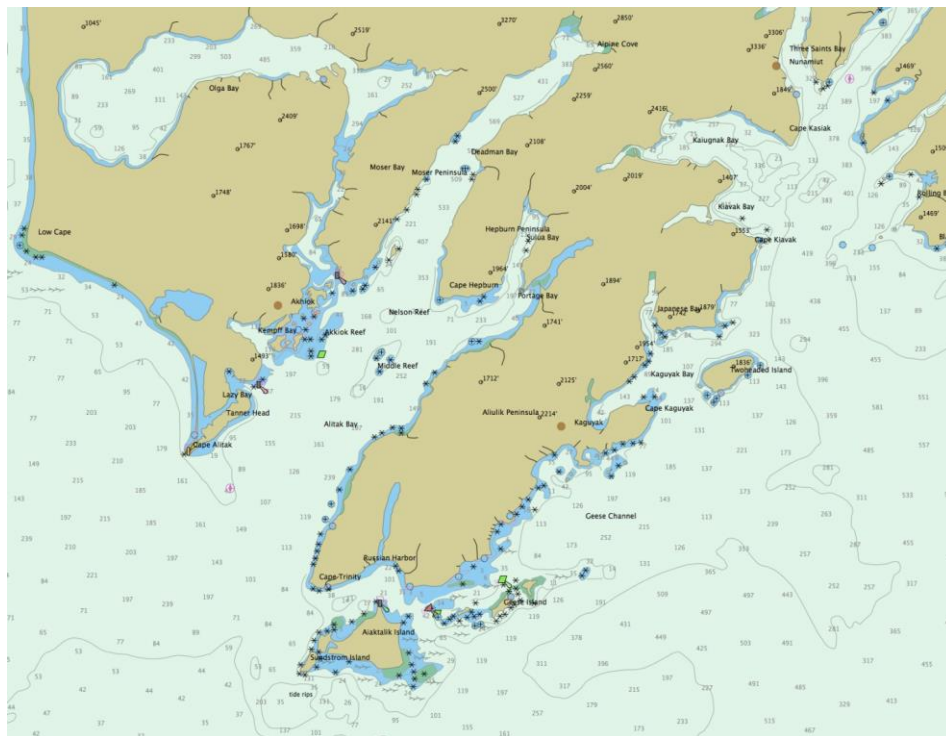




Larsen Bay Subsistence Area Map







APPENDIX H

PICTURES OF SHELLFISH



Blue mussel

Fragile black/blue shell,
Long and thin pointed at hinge
Attached to a hard surface



Razor clam

Long oval fragile shells
Unable to close shells



Butter clam

Often heavy thick shell,
Only circular grooves
on shell surface



Pinkneck clam (Surf clam)

Can be very large, thick heavy shell,
Brownish/olive colored shell layer that
is partially eroded, pink neck (siphon)



Pacific littleneck clam

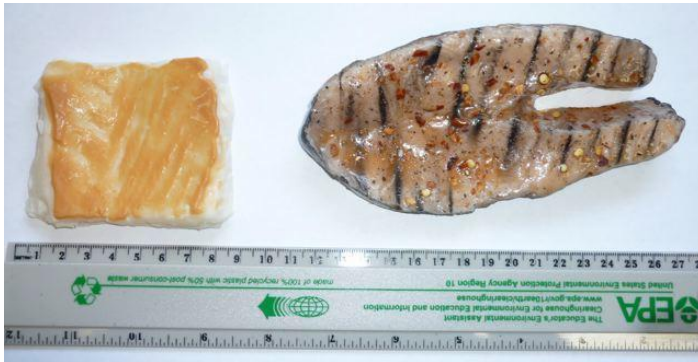
Shape similar to butter clam,
Often smaller, has two types of
grooves on the shell surface (circular
and radial) forming a cross etched pattern



Heart cockle

Two types of grooved on
shell surface (shallow circular
and deep radial grooves
Often found surface of beach

APPENDIX I PICTURES OF FOOD MODELS



APPENDIX J

BIBLIOGRAPHIC LIST OF FISH ID BOOKS IN THE COLLECTION OF SUN'AQ TRIBE OF KODIAK'S NATURAL RESOURCES DEPARTMENT

Byersdorfer, SC, and Watson, LJ. 2010. Field guide to common marine fishes and invertebrates of Alaska. Fairbanks (AK): Alaska Sea Grant College Program, University of Alaska Fairbanks, 358 p.

Harbo, RM. 1999. *Whelks to whales: coastal marine life of the Pacific Northwest*. Madeira Park (BC): Harbour Publishing, 248 p.

Hauser, William J, 2011. *Fishes of the Last Frontier*. Anchorage, AK: Publication Consultants.

Lamb, A, and Hanby, BP. 2005. *Marine life of the Pacific Northwest*. Madeira Park (BC): Harbour Publishing, 398 p.

Pollard, WR, Hartman, GF, and Edgell, P. 1997. *Field identification of coastal juvenile salmonids*. Madeira Park (BC): Harbour Publishing, 32 p.

Alaska Department of Environmental Conservation. *Pictures of Shellfish*. Retrieved from URL.
<http://dec.alaska.gov/eh/fss/seafood/Docs/Shellfish-Alaska.pdf>